



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Presentation on Higher Education Space Planning to the Assembly Select Committee on Growth and Infrastructure Wednesday, October 19, 2005

“Space and utilization standards” are budgetary planning tools that measure the need for space in California public higher education systems and are common in other areas of State facilities planning. California’s higher education space standards were researched and developed between 1948 and 1966, first by consultants and researchers dealing with the post World War II enrollment surge, then by planners working towards the State’s eventual adoption of a higher education Masterplan, and finally as research done by the Commission’s predecessor, the Coordinating Council for Higher Education.

TABLE 1 The Evolution of Higher Education Space and Use Policies in California

1948 – *A Report on a Survey of the Needs of California Higher Education* (George Strayer and Associates).

1955 – *A Restudy of the Needs of California Higher Education* (T. R. McConnell). First California higher education space and use standards; developed in anticipation of the building program envisioned in the “Masterplan for Higher Education.”

1965 – Senate Bill 318 of 1965. Required development of elements of space/use standards for instructional space in junior colleges; developed in response to Master Plan recommendations for State construction of a public junior college system.

1966 – *Space and Utilization Standards, California Public Higher Education* (CCHE – CPEC’s predecessor). The first review of space/use standards since the 1955 *Restudy*; it was focused primarily on classrooms and class labs.

1970 – *The California Higher Education Facilities Planning Guide of 1970* (CCHE and U.S. Dept of Ed.). Attempted to explain major elements of space/use standards in general planning; was primarily oriented towards the UC.

1971 – ACR 151 (1970). Increased classroom utilization standards, directed CCHE to study space use in CSU; was done in response to defeat of \$200 million bond issue, “Proposition 3 of 1968,” which had led to concerns of insufficient resources.

1973 – Supplemental Report Language to the 1973-74 Budget Act. Increased utilization standards for class laboratories to same high levels required in ACR 151 for classrooms; was adopted to deal with State fiscal crisis during the recession.

1985 – Supplemental Report Language to the 1985-86 Budget Act. Directed CPEC to study space/use standards for classrooms, laboratories, and faculty offices – *Time and Territory* (CPEC, February 1986). This led to 1987-88 appropriation of \$300,000 to CPEC to perform a more comprehensive analysis – *A Capacity for Learning* (CPEC, January 1990).

1990 – *A Capacity for Learning* (CPEC). The most recent analytical report, which reviews existing standards and presents recommendations for revisions.

CPEC’S PRIOR SPACE PLANNING RECOMMENDATIONS

In response to legislative directives in 1985 and 1987, the California Postsecondary Education Commission worked with national consultants MGT and Associates and an advisory committee to evaluate California’s higher education planning standards and guidelines. The advisory committee for this project included representatives from the California Department of Finance, the Legislative Analyst’s Office, legislative staff, and the three public higher education systems. The Committee met 22 times between 1985 and 1990 and its work led to the 1990 Commission report *A Capacity for Learning*.

TABLE 2 Summary of Major Recommendations from the 1990 CPEC Report, *A Capacity for Learning*

- I. General recommendations:** simplify the standards wherever possible and apply them campus-wide, not to individual projects; require biennial segmental reports on space use; establish a permanent CPEC space/use standards advisory committee.
- II. Classrooms:** slightly relax classroom utilization standards, but continue them as being among the most stringent in the nation; maintain an Assignable Square Footage (ASF-per-station) standard; provide for storage space in CCCs.
- III. Teaching Labs:** institute a single use standard for lower-and upper-division; set standards for five laboratory types, a dramatic reduction from the individual standards for several dozen disciplines; allow minor increase in storage space (2-4%) in all three systems.
- IV. Research space:** establish guidelines for six laboratory types and allocate space for only “primary” researchers – State-funded faculty, graduate students and postdoctoral fellows; set space/use guidelines near national norms and in conformity with recent practice, including office space for graduate students.
- V. Faculty offices:** improve office space for CCCs by 58%, for CSU by 14.3%, and for UC by 9.4%; the CCCs had minimal formula space for offices (none for part-time faculty) and other functions in the 1966 CCHE space standards.

The California Legislature did not formally adopt the Commission guidelines in 1990, again due to State budget pressures from the severe economic recession in the early 1990s. Thus, the California Community Colleges and the California State University have been required to continue using the old 1955 – 1973 space and usage standards in developing their building proposals. The University of California, however, did adopt the 1990 Commission standards and has used them in the development of its facilities proposals since the early 1990s. The Legislature and Governor have annually approved UC’s building programs using the 1990 Commission space guidelines.

PROBLEMS WITH USING OUT-DATED SPACE PLANNING POLICIES

Federal, state and local regulations guiding the construction of public buildings have changed substantially over the decades since California's higher education space standards were developed. Environmental considerations, accommodations for persons with disabilities, earthquake-related seismic updates, and basic fire codes all require more space than is generated by the State's out-dated space and utilization standards.

TABLE 3 Events Affecting the Adequacy of Current Space Standards

- ✓ The federal Americans with Disabilities Act (ADA) enacted in 1990, preceded in California by Assembly Bill 746 (Hayden, Chapter 829, Statutes of 1987), increased accessibility requirements for college students with disabilities. Increased space requirements include: appropriately sloped ramps, widened walking surfaces, increased door widths, modified class lab workstations, increased chair lifts and elevators, modified classroom facilities, and modified lavatories.
- ✓ Advancements in fire, life, and safety technologies have led to increased local building code requirements. For example, local building codes now mandate that buildings have updated water pressure capacity, requiring some colleges to install their own pumping equipment.
- ✓ After the Northridge earthquake, the State of California strengthened its seismic safety codes and increased structural system design requirements.
- ✓ Technological advances – such as the computer – are required in today's educational environment. These additional space needs include: data equipment, space in electrical rooms for panels needed for additional power for computers, satellites and other new technologies, equipment and desks needed to facilitate computer use, and space to house the computer labs and related uses.
- ✓ Contemporary design, construction, and renovation techniques that can substantially lengthen building life and utility when they are incorporated into space planning policies. These include: "Green Building" (environmentally efficient) design and other "smart building" technologies. Space requirements for something as simple as a janitor's closet have changed substantially since 1973.
- ✓ Increased space is now required to accommodate modern-day cleaning and building maintenance equipment that had not even been invented when the current space standards were developed.

Advances in construction and building renovation techniques have lengthened building life and utility far beyond that envisioned in California's present higher education space and utilization standards. Updated space allocation and utilization policies are needed to address the deficiencies listed above and to facilitate contemporary education.

RECENT CPEC FINDINGS IN SPACE PLANNING

Beginning in 2003, the Commission sought to examine higher education space guidelines from a national perspective, since more than a decade had passed since *A Capacity for Learning*. The Commission solicited information from around the country and received direct responses from 34 states. The Commission received several reports on facilities space planning and supplemented survey and interview responses with national research done by such consultants as MGT of America and Paulien & Associates.

TABLE 4 Summary of the Conclusions from: *Space and Utilization Policies in Higher Education: A Commission Update*

- No state in the nation reports a date any earlier than California's 1971 – 1973 for their most-recent legislatively-adopted higher education space standards. The average date of legislative adoption, nationally, for current state policies in this area is the year 1994.
- Nearly every state reports using more flexible space and utilization guidelines in practice for allocating space, as opposed to regulatory space standards – even states with space standards on their books.
- No state surveyed has space standards that deny office space to part-time faculty and research space to postdoctoral fellows involved in research, as do California's old standards.
- No state builds assumptions of 100% summer utilization into its space planning policies, although many states specifically encourage summer utilization of campuses.
- CPEC's 1990 space and utilization guidelines are still among the most stringent in the nation and no state has overall space guidelines that are more stringent than the 1990 CPEC policies.
- Only 4 states have utilization rates higher than the CPEC guidelines. In each case, the rates are only higher for selected types of institutions and specific types of space among the dozens of categories of space for which these policies exist. For example, Arizona has higher weekly room hours usage and station occupancy rates in teaching laboratories at its universities, but not its community colleges.

Source: *Update on Space and Utilization Policies in Higher Education* (CPEC, September 2004)
<http://www.cpec.ca.gov/completereports/2004Reports/04-13.asp>

The overwhelming majority of states use permissive guidelines and general operating parameters instead of mandates or they leave space planning decisions to the higher education institutions and adjudicate them through the state's budgeting processes. Most states see this as the new national norm and a more efficient and effective way of managing campuses' ever-evolving space needs, while maintaining state oversight.

CPEC supports this approach to higher education facilities planning, which maintains the role of State policymakers as final arbiters in the facilities development and approval process, while allowing campuses to design space in ways that best meet the needs of their students, academic programs, and mission.